

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference BP109776	<div style="display: flex; justify-content: space-between;"> <div>FOR FURTHER ACTION</div> <div style="font-size: small;">see Form PCT/ISA/220 as well as, where applicable, item 5 below.</div> </div>	
International application No. PCT/FI 2004/000579	International filing date (day/month/year) 4 October 2004	(Earliest) Priority Date (day/month/year) 7 October 2003
Applicant Nokia Corporation et al		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 2 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report.

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (see Box No. II)

3. ☐ Unity of invention is lacking (see Box No. III)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 6

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000579

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G10L 19/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G10L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1098298 A2 (MITSUBISHI DENKI KABUSHIKI KAISHA), 9 May 2001 (09.05.2001), paragraphs 0036 - 0052 --	1-32
A	US 6175817 B1 (MUELLER, J-M. ET AL), 16 January 2001 (16.01.2001), column 1, line 44 - column 2, line 43, figure 3 --	1-32
A	EP 0307122 A1 (BRITISH TELECOMMUNICATIONS), 26 August 1988 (26.08.1988), claims; abstract --	1-32
A	US 20030097258 A1 (THYSSEN, J.), 22 May 2003 (22.05.2003), paragraphs 0083 - 0086; abstract -- -----	1-22



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

8 February 2005

Date of mailing of the international search report

10-02-2005

Name and mailing address of the ISA/
Swedish Patent Office
Box 5055, S-102 42 STOCKHOLM
Facsimile No. +46 8 666 02 86

Authorized officer

Fredrik Blomqvist /OGU
Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

Information on patent family members.

30/01/2005

International application No.

PCT/FI 2004/000579

EP	1098298	A2	09/05/2001	CN	1135527	B,C	21/01/2004
				CN	1295317	A	16/05/2001
				JP	3594854	B	02/12/2004
				JP	2001134297	A	18/05/2001

US	6175817	B1	16/01/2001	NONE			
----	---------	----	------------	------	--	--	--

EP	0307122	A1	26/08/1988	SE	0307122	T3	
				AT	75069	T	15/05/1992
				CA	1337217	A,C	03/10/1995
				DE	3870114	A	21/05/1992
				DK	172571	B	25/01/1999
				DK	206189	A	27/04/1989
				FI	103221	B	00/00/0000
				FI	892049	A	28/04/1989
				GB	8720389	D	00/00/0000
				HK	128896	A	26/07/1996
				JP	2501166	T	19/04/1990
				JP	2957588	B	04/10/1999
				NO	301356	B	13/10/1997
				NO	891724	A	26/04/1989
				US	RE35057	E	10/10/1995
				US	4991214	A	05/02/1991
				WO	8902147	A	09/03/1989
				GB	8721667	D	00/00/0000

INTERNATIONAL SEARCH REPORT
Information on patent family members

30/01/2005

International application No.

PCT/FI 2004/000579

US	20030097258	A1	22/05/2003	US	6813602	B	02/11/2004
				EP	1105871	A	13/06/2001
				TW	440814	B	00/00/0000
				US	6480822	B	12/11/2002
				US	20020138256	A	26/09/2002
				WO	0011655	A	02/03/2000
				CA	2341712	A	02/03/2000
				EP	1105870	A	13/06/2001
				EP	1105872	A	13/06/2001
				EP	1110209	A	27/06/2001
				EP	1194924	A	10/04/2002
				JP	2002523806	T	30/07/2002
				TW	440813	B	00/00/0000
				TW	444187	B	00/00/0000
				TW	448417	B	00/00/0000
				TW	448418	B	00/00/0000
				TW	454168	B	00/00/0000
				TW	454169	B	00/00/0000
				TW	454170	B	00/00/0000
				TW	454171	B	00/00/0000
				US	5918409	A	06/07/1999
				US	6104992	A	15/08/2000
				US	6173257	B	09/01/2001
				US	6188980	B	13/02/2001
				US	6240386	B	29/05/2001
				US	6260010	B	10/07/2001
				US	6330531	B	11/12/2001
				US	6330533	B	11/12/2001
				US	6385573	B	07/05/2002
				US	6397176	B	28/05/2002
				US	6449590	B	10/09/2002
				US	6493665	B	10/12/2002
				US	6507814	B	14/01/2003
				US	6556966	B	29/04/2003
				US	6714907	B	30/03/2004
				US	6823303	B	23/11/2004
				US	20010023395	A	20/09/2001
				US	20020007269	A	17/01/2002
				US	20020103638	A	01/08/2002
				WO	0011648	A	02/03/2000
				WO	0011649	A	02/03/2000
				WO	0011650	A	02/03/2000
				WO	0011651	A	02/03/2000
				WO	0011652	A	02/03/2000
				WO	0011653	A	02/03/2000
				WO	0011654	A	02/03/2000
				WO	0011656	A	02/03/2000
				WO	0011657	A	02/03/2000
				WO	0011658	A	02/03/2000
				WO	0011659	A	02/03/2000
				WO	0011660	A	02/03/2000
				WO	0011661	A	02/03/2000

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000579

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G10L 19/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G10L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1098298 A2 (MITSUBISHI DENKI KABUSHIKI KAISHA), 9 May 2001 (09.05.2001), paragraphs 0036 - 0052 --	1-32
A	US 6175817 B1 (MUELLER, J-M. ET AL), 16 January 2001 (16.01.2001), column 1, line 44 - column 2, line 43, figure 3 --	1-32
A	EP 0307122 A1 (BRITISH TELECOMMUNICATIONS), 26 August 1988 (26.08.1988), claims; abstract --	1-32
A	US 20030097258 A1 (THYSSEN, J.), 22 May 2003 (22.05.2003), paragraphs 0083 - 0086; abstract -- -----	1-22

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

8 February 2005

Date of mailing of the international search report

10-02-2005

Name and mailing address of the ISA/
Swedish Patent Office
Box 5055, S-102 42 STOCKHOLM
Facsimile No. +46 8 666 02 86

Authorized officer

Fredrik Blomqvist /OGU
Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

Information on patent family members

30/01/2005

International application No.

PCT/FI 2004/000579

EP	1098298	A2	09/05/2001	CN	1135527 B,C	21/01/2004
				CN	1295317 A	16/05/2001
				JP	3594854 B	02/12/2004
				JP	2001134297 A	18/05/2001

US	6175817	B1	16/01/2001	NONE
----	---------	----	------------	------

EP	0307122	A1	26/08/1988	SE	0307122 T3	
				AT	75069 T	15/05/1992
				CA	1337217 A,C	03/10/1995
				DE	3870114 A	21/05/1992
				DK	172571 B	25/01/1999
				DK	206189 A	27/04/1989
				FI	103221 B	00/00/0000
				FI	892049 A	28/04/1989
				GB	8720389 D	00/00/0000
				HK	128896 A	26/07/1996
				JP	2501166 T	19/04/1990
				JP	2957588 B	04/10/1999
				NO	301356 B	13/10/1997
				NO	891724 A	26/04/1989
				US	RE35057 E	10/10/1995
				US	4991214 A	05/02/1991
				WO	8902147 A	09/03/1989
				GB	8721667 D	00/00/0000

INTERNATIONAL SEARCH REPORT

Information on patent family members

30/01/2005

International application No.

PCT/FI 2004/000579

US 20030097258 A1 22/05/2003

US	6813602 B	02/11/2004
EP	1105871 A	13/06/2001
TW	440814 B	00/00/0000
US	6480822 B	12/11/2002
US	20020138256 A	26/09/2002
WO	0011655 A	02/03/2000
CA	2341712 A	02/03/2000
EP	1105870 A	13/06/2001
EP	1105872 A	13/06/2001
EP	1110209 A	27/06/2001
EP	1194924 A	10/04/2002
JP	2002523806 T	30/07/2002
TW	440813 B	00/00/0000
TW	444187 B	00/00/0000
TW	448417 B	00/00/0000
TW	448418 B	00/00/0000
TW	454168 B	00/00/0000
TW	454169 B	00/00/0000
TW	454170 B	00/00/0000
TW	454171 B	00/00/0000
US	5918409 A	06/07/1999
US	6104992 A	15/08/2000
US	6173257 B	09/01/2001
US	6188980 B	13/02/2001
US	6240386 B	29/05/2001
US	6260010 B	10/07/2001
US	6330531 B	11/12/2001
US	6330533 B	11/12/2001
US	6385573 B	07/05/2002
US	6397176 B	28/05/2002
US	6449590 B	10/09/2002
US	6493665 B	10/12/2002
US	6507814 B	14/01/2003
US	6556966 B	29/04/2003
US	6714907 B	30/03/2004
US	6823303 B	23/11/2004
US	20010023395 A	20/09/2001
US	20020007269 A	17/01/2002
US	20020103638 A	01/08/2002
WO	0011648 A	02/03/2000
WO	0011649 A	02/03/2000
WO	0011650 A	02/03/2000
WO	0011651 A	02/03/2000
WO	0011652 A	02/03/2000
WO	0011653 A	02/03/2000
WO	0011654 A	02/03/2000
WO	0011656 A	02/03/2000
WO	0011657 A	02/03/2000
WO	0011658 A	02/03/2000
WO	0011659 A	02/03/2000
WO	0011660 A	02/03/2000
WO	0011661 A	02/03/2000